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07/02/2003

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EXAMINER

SHRADER, LAWRENCE J

ART UNIT

PAPER NUMBER

2124

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/718,371

Applicant(s)

YOO, CHANG-WOONG

Examiner

Lawrence Shrader

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because the length exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 2, and 4 – 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Feinleib, U.S. Patent 6,343,360.

**In regard to claim 1:**

Feinleib discloses a computer system containing product information:

*“Storing means for storing the operating system program;”* The operating system stored on disk (column 5, lines 56 – 62).

*“Memory means for storing the product key information of the operating system...input by user, when the operating system is installed in the storing means;”* Disk or RAM storage is available for storage of product information entered by the user (column 5, lines 56 – 62).

*“Writing means for writing the product key information in the memory means;”* A program (GUI) is available to write the key information into the memory (column 6, lines 5 – 10; lines 30 - 36).

*“Input means for reading out the product key information and inputting the read-out product key information in an information input window...”* A GUI program is disclosed to provide input and output information (column 1, lines 59 – 66; column 6, lines 5 – 10; lines 30 – 36, e.g., Figure 1)

**In regard to claim 2, incorporating the rejection of claim 1:**

*“...the storing means is a boot device.”* The system is booted from the storing means (column 1, column 54 – 57).

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**In regard to claim 4**, incorporating the rejection of claim 1:

*“...the writing means is a program installed in the storing means.”* A GUI program is called to provide input and output information (column 1, lines 59 – 66; column 6, lines 5 – 10; lines 30 – 36, e.g., Figure 1)

**In regard to claim 5**, incorporating the rejection of claim 1:

*“...the input means is a program.”* A GUI program is disclosed to provide input and output information (column 1, lines 59 – 66; column 6, lines 5 – 10; lines 30 – 36, e.g., Figure 1)

**In regard to claim 6**, Feinleib discloses a standard computer system using computer product information and writing product information to memory when the operating system is installed:

*“Making a user manually input the product key information corresponding to a procedure of installing the operating system program;”* During the first boot sequence, data relevant to the installation procedure is input by the user (column 3, lines 9 – 20, lines 30 – 42, e.g., Figure 1).

*“Executing a product key information writing program;”* The relevant product configuration information is run in a GUI (column 3, lines 35 – 49).

*“Writing the manually input product key information into the auxiliary memory.”* The relevant product configuration information is stored (column 3, lines 43 – 49).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feinleib, U.S. Patent 6,343,360 in view of Matthews et al., 5,844,987 (hereinafter referred to as Matthews), and further in view of Wilz, Sr. et al., U.S. Patent 6,510,997 (hereinafter referred to as Wilz).

**In regard to claim 8**, Feinleib teaches a configuration system that queries the user for appropriate information used to configure the hardware and/or the software:

*“Reading out the product key information from the auxiliary memory;”* Feinleib discloses that the product key information is read from memory (column 3, lines 50 – 52).

Feinleib does not teach *“checking whether the read-out product key information is matched...”*, but Matthews discloses a method that compares (checks for a match) a codeword (key information) with another codeword stored in memory (column 8, lines 32 – 39). The method of matching information relating to some entity with like information in a memory is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Feinleib with the method of comparing information with a value in memory as taught by Matthews because this combination

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allows the user to check a value or range of values for information that will be used to determine a future action in the system.

Feinleib does not teach “*if matched, automatically inputting the product key information in a product key information window displayed on a screen...*”, but Wilz teaches automatically inputting a stored HTTP address (key information) to a window displayed on a screen and automatically runs a function (corresponding to an installation function) from the inputted information (column 16, lines 38 – 48). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Feinleib with the method of comparing or matching information with a value in memory as taught by Matthews, and further combining it with the display and run function of the Wilz invention because the ability to automatically fill an input window and run the corresponding program allows the automatic checking of criteria for updating, and then running without user intervention providing user convenience and decreased user input errors.

**In regard to claim 9**, incorporating the rejection of claim 8:

“*...program stored on a CD-ROM in a CD-ROM drive.*” Feinleib teaches a system that allows for storage on a CD-ROM on a CD-Rom drive (see Figure 3).

**In regard to claim 10**, incorporating the rejection of claim 8:

“*...program stored on a hard disk of a recovery disk drive.*” Feinleib teaches a system that allows for storage on hard disk drive (see Figure 3).

6. Claims 11, 12, 15 – 19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feinleib, U.S. Patent 6,343,360 in view of Sobel, U.S. Patent 6,205,558, and

further in view of Matthews et al., 5,844,987 (hereinafter referred to as Matthews), and of Wilz, Sr. et al., U.S. Patent 6,510,997 (hereinafter referred to as Wilz), and further in view of Microsoft Computer Dictionary, Fifth Edition.

**In regard to claim 11:**

*“Executing a key input program...”* Feinleib runs a GUI program to input key information that is used to configure the computer system, and stores the information in local memory (column 3, lines 43 – 53).

*“Executing a recovery program ...”* Feinleib teaches a software configuration program, but does not teach the execution of a recovery program if the operating system fails. However, Sobel teaches the execution of a recovery program (column 4, lines 14 – 25). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration program taught by Feinleib with the recovery program of Sobel because whenever one configures or reconfigures a system there is always the possibility of error or an inadvertent reset. In that scenario it becomes necessary to provide a recovery procedure which the Sobel provides for the Feinleib system.

*“Read out said product key information from said CMOS RAM...;”* Feinleib discloses that the product key information is read from memory (column 3, lines 50 – 52).

Feinleib does not teach *“comparing said product key information read out...;”*, but Matthews discloses a method that compares (checks for a match) a codeword (key information) with another codeword stored in memory (column 8, lines 32 – 39). The method of matching information relating to some entity with like information in a memory is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was



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made to combine the configuration system of Feinleib with the method of comparing information with a value in memory as taught by Matthews because this combination allows the user to check a value or range of values for a piece of information that will be used to determine a future action in the system.

Feinleib does not teach "*automatically inputting the product key information read out...*", but Wilz teaches automatically inputting a stored HTTP address (key information) to a window displayed on a screen and automatically runs a function (corresponding to an installation function) from the inputted information (column 16, lines 38 – 48). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Feinleib with the method of comparing or matching information with a value in memory as taught by Matthews, and further combining it with the display and run function of the Wilz invention because the ability to automatically fill an input window and run the corresponding program allows the automatic checking of criteria for updating, and then running without user intervention providing user convenience and decreased user input errors.

None of the cited references disclose or use CMOS RAM as claimed. However, it is well known in the art that CMOS RAM is implemented in many computer systems, especially used to store parameters in low power battery-backed memory as disclosed in the Microsoft Computer Dictionary, Fifth Edition, p. 105. It would have been obvious to one skilled in the art at the time the invention was made to use CMOS RAM for the purpose of storing parameters because the configuration information could have been preserved in a battery back-up memory and available for use upon booting.

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**In regard to claim 12**, incorporating the rejection of claim 11:

*"...storing said product key information manually input...onto hard disk."* Feinleib teaches that the manually input key information is stored on the hard disk (column 5, lines 56 – 62).

**In regard to claim 15**, incorporating the rejection of claim 13:

*"...converting each ASCII character into six bit code;"* Official notice is taken that conversion of ASCII code to hexadecimal format would have been well known to one skilled in the art at the time the invention was made.

*"generating hexadecimal values for storage...by grouping the bits of the six bit codes corresponding to every four ASCII characters into three bytes."* Official notice is taken that grouping mapping ASCII values into x-length strings of bytes in memory would have been well known to one skilled in the art at the time the invention was made.

**In regard to claim 16**, incorporating the rejection of claim 15:

*"..converting each ASCII character into a six bit code comprises subtracting the hexadecimal value 30h from the hexadecimal of the ASCII character."* Official notice is taken that subtracting 30h from the hexadecimal value of the ASCII character to convert the ASCII character would have been well known to one skilled in the art at the time the invention was made.

**In regard to claim 17**, incorporating the rejection of claim 15:

*"...reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values."* Official notice is taken that using a

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hexadecimal to binary conversion lookup table would have been well known to one skilled in the art at the time the invention was made.

**In regard to claim 18**, incorporating the rejection of claim 13:

*“...converting each ASCII character into six bit code;”* Official notice is taken that conversion of ASCII code to a 5-bit code format (a.k.a. Baudot code) would have been well known to one skilled in the art at the time the invention was made.

*“generating hexadecimal values for storage...by grouping the bits of the five bit codes corresponding to every three ASCII characters into two bytes.”* Official notice is taken that grouping mapping ASCII values into x-length strings of bytes in memory would have been well known to one skilled in the art at the time the invention was made.

**In regard to claim 19**, incorporating the rejection of claim 18:

*“...reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values.”* Official notice is taken that using a hexadecimal to binary conversion lookup table would have been well known to one skilled in the art at the time the invention was made.

**In regard to claim 21**, incorporating the rejection of claim 11:

*“...program stored on a hard disk of a recovery disk drive.”* Feinleib teaches a system that allows for storage on hard disk drive (see Figure 3).

**In regard to claim 22**, incorporating the rejection of claim 11:

*“...program stored on a CD-ROM in a CD-ROM drive.”* Feinleib teaches a system that allows for storage on a CD-ROM on a CD-Rom drive (see Figure 3).

7. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feinleib, U.S. Patent 6,343,360 as applied to claims 1 and 12 respectively, in view of Ledain et al., U.S. Patent 6,021,408 (hereinafter referred to as Ladain).

**In regard to claim 3**, incorporating the rejection of claim 1:

*“...the memory means further stores information indicating the type of operating system program that was installed and indicating a compress conversion process of the product key information.”*

Feinleib teaches storage of product information entered by the user, but does not indicate a compress conversion process of any information. However, Ledain teaches compression of file and system information in a data storage subsystem (column 5, lines 37 – 61; column 6, lines 44 – 54). Operating system information and other application software information, including the product information, would be transparently compressed. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the software configuration system of Feinleib with the compression feature of the Ledain invention because this feature would allow more information to be stored in a given space, thus allowing more efficient use of memory.

**In regard to claim 13**, incorporating the rejection of claim 12:

*“Reading said product key information from said hard disk;”* Feinleib reads product key information from the database on disk (column 6, lines 48 – 56).

*“Storing said encoded product key information....”* Feinleib stores product key information to the database on disk (column 5, lines 56 – 62).

*"Encoding said product information using a compression conversion process..."*

Feinleib teaches storage of product information entered by the user, but does not indicate a compress conversion process of any information. However, Ledain teaches compression of file and system information in a data storage subsystem (column 5, lines 37 – 61; column 6, lines 44 – 54). Operating system information and other application software information, including the product information, would be transparently compressed. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the software configuration system of Feinleib with the compression feature of the Ledain invention because this feature would allow more information to be stored in a given space, thus allowing more efficient use of memory.

8. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feinleib, U.S. Patent 6,343,360 in view of Miura, U.S. Patent 6,021,408.

**In regard to claim 7, incorporating the rejection of claim 6:**

*"...deleting the product key information writing program after the product key information is written into the auxiliary memory."* Feinleib teaches a configuration system that queries the user for appropriate information used to configure the hardware and/or the software, but does not teach deletion of the writing program after the product information is written to memory. However, Miura teaches the deletion of a program after execution (column 4, lines 29 – 33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Feinleib with the function of deleting a program after execution as taught by Miura, because this combination provides another level of

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security to the Feinleib invention by preventing an unauthorized installation in the case when only one installation is allowed.

**In regard to claim 14**, incorporating the rejection of claim 13:

*“...uninstalling said key input program from said hard disk after said storing step.”*

Feinleib teaches a configuration system that queries the user for appropriate information used to configure the hardware and/or the software, but does not teach deletion of the input program after the product information is stored. However, Miura teaches the deletion of a program after execution (column 4, lines 29 – 33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Feinleib with the function of deleting a program after execution as taught by Miura, because this combination provides another level of security to the Feinleib invention by preventing an unauthorized installation in the case when only one installation is allowed.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feinleib, U.S. Patent 6,343,360 in view of Sobel, U.S. Patent 6,205,558, and further in view of Matthews et al., 5,844,987 (hereinafter referred to as Matthews), and of Wilz, Sr. et al., U.S. Patent 6,510,997 (hereinafter referred to as Wilz), and of Pearce et al., U.S. Patent 6,243,468 (hereinafter referred to as Pearce).

**In regard to claim 20**, incorporating the rejection of claim 11:

Feinleib discloses a software configuration with program product key information, and Matthews discloses a method that compares a codeword (key information) with another codeword stored in memory, but neither Feinleib nor Matthews teaches the checking of a

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checksum of stored key information. However, Pearce teaches the use of a checksum in associated with the product key information (column 2, lines 44 – 60). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Feinleib with the method of comparing input information with a value in memory as taught by Matthews and modified by the checksum feature of Pearce because the checksum provides a layer of error correction, and also security, by ensuring that the proper information is being used for the key product information comparison.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent 6,169,976 B1 to Colosso, regarding regulating the use of licensed products using key information.

U.S. Patent 6,578,199 B1 to Tsou et al., regarding the tracking of distributable software and the input of serial number at installation.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Shrader whose telephone number is (703) 305-8046. The examiner can normally be reached on M-F 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Lawrence Shrader  
Examiner  
Art Unit 2124

June 24, 2003

*Kakali Chaki*  
**KAKALI CHAKI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**